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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,340	11/18/2003	Hideki Matsumoto	NGB-118-A	7601
21828	7590	10/02/2006	EXAMINER	
CARRIER BLACKMAN AND ASSOCIATES			VANAMAN, FRANK BENNETT	
24101 NOVI ROAD			ART UNIT	
SUITE 100			PAPER NUMBER	
NOVI, MI 48375			3618	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,340	MATSUMOTO ET AL.	
	Examiner	Art Unit	
	Frank Vanaman	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 7, 8, 10, 12 and 13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 11 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/9/06</u> | 6) <input type="checkbox"/> Other: _____ |

Status of Application

1. Applicant's amendment, filed June 14, 2006, has been entered in the application. Claims 1-16 are pending, with claims 7, 8, 10, 12 and 13 withdrawn from consideration, there being no allowed generic claim.

Election/Restriction

2. Applicant continues to assert a traversal of the original election of species requirement. Applicant has, however, asserted no arguments. As such, the examiner understands applicant's only arguments to constitute those which were previously asserted, and which were completely treated by a previous office action. No further discussion appears necessary in this regard.

Claim Rejections - 35 USC § 112

3. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 16, lines 1-3, the recitation of the canister and expansion chambers as being arranged proximate each other, followed by a recitation of heat exchange between the two elements, appears contradictory with the recitation of claim 14, lines 12-13, wherein the two elements are cited as being in respective recessed portions, and thus understood not to be proximate one another, but at least separated from one another by any material surrounding the recessed portions.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 4-6, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al. (US 5,988,145) in view of Matsumoto et al. (JP 2000-85382). Horiuchi et al. teach a vehicle having a passenger compartment which includes at least a rear seat (col. 3, lines 44-45) in close proximity to which is positioned a fuel tank (T), the engine (E) being located at a front end of the vehicle and forward of a passenger compartment; the fuel line to the engine including a canister (C) which receives fuel from the tank and supplies fuel to the engine, and which may be

positioned in one of numerous locations, which canister stores and releases evaporative fuel emissions (col. 2, lines 39-46).

While Horiuchi et al. fail to explicitly state that tank T is located under a rear seat, in view of one of the potential locations of the canister as being "below a rear seat in the vicinity of the fuel tank", it would have been obvious to one of ordinary skill in the art at the time of the invention to place the fuel tank at least partially under the rear seat for the purpose of increasing room in the trunk space.

The reference to Horiuchi et al. fails to teach the provision of an exhaust pipe and canister positioned in respective recessed accommodating portions below the passenger compartment between the fuel tank and engine. Matsumoto et al. teach a vehicle structure wherein a floor portion of a passenger compartment is provided with plural recessed positions (41, 44, note figure 4), which locations are beneath passenger and driver seats (7, 8), one location including a fuel line (48), the other including an exhaust line (47). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vehicle of Horiuchi et al with an under-floor structure as shown in Matsumoto et al., to include the recessed portions formed at least on an upper side by the floor portion (e.g., 42, 43, 44, 45, 46, etc.), through one of which an exhaust line passes, and through the other of which the fuel line passes, for the purpose of increasing the available mechanical space beneath the vehicle, facilitating the accommodation of more vehicle elements there-below. In view of Horiuchi et al. teaching that the canister may be positioned in one of numerous locations, it would have been obvious to one of ordinary skill in the art at the time of the invention to position the canister in one of the recessed portions (e.g., along the fuel line), so as to prevent it from taking up space in the engine room or trunk storage location.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al. in view of Matsumoto et al. and Yasuo (JP 2001-152839). The references to Horiuchi et al. and Matsumoto et al. are discussed above and fail to teach an expansion element in the exhaust line. Yasuo teaches, in the description of the prior art (figure 6) that it is old and well known to place an expansion element (5) in an exhaust line (4, 6), and to position that element under a forward seating space. It would have

been obvious to one of ordinary skill in the art at the time of the invention to place an expansion element such as taught by Yasuo's description of the prior art, in a region under a seat (as taught by Yasuo and previously provided in the combination by the reference to Matsumoto et al.), in the vehicle of Horiuchi et al. as modified by Matsumoto et al., for the purpose of locating the element in a zone under the vehicle where it does not reduce the amount of storage space, or operating space in the engine compartment.

Allowable Subject Matter

7. Claims 14 and 15 are allowed.
8. Claim 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Comments

9. Applicant's comments, filed with the amendment, have been carefully considered. Applicant's arguments appear to be directed primarily to the modifying reference of Matsumoto, in the assertion that since Matsumoto teaches that the fuel tank is below a driver's and/or passenger's seat, the limitations of the claims are not met. Firstly, the examiner notes that the base reference is that of Horiuchi et al., which teaches a fuel tank located closely proximate a rear seat portion of a vehicle compartment (note figure 1, Horiuchi, also col. 3, lines 44-45). While the Horiuchi et al. reference does not explicitly teach that the fuel tank is below a rear seat, it teaches a tank in that region of a vehicle which is, as applicant has noted, not described in further detail, and at col. 3, lines 44-45 teaches an alternate location of the canister which is below the seat and proximate the fuel tank. As such, it is deemed obvious that a fuel tank so located would be below a rear seat.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, please note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the examiner has not suggested that the reference to Matsumoto be incorporated in a wholesale manner into the teachings of Horiuchi et al., rather that it would be obvious to provide accommodating spaces for the fuel line and exhaust lines, as set forth in the rejection above.

A conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than the lack thereof (see *In re Sovish* 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)); further, references may be combined although none of them explicitly suggests combining one with the other (see *In re Nilssen* 7 USPQ2d 1500 (Fed. Cir. 1989)). It has long been the law that the motivation to combine need not be found in prior art references, but equally can be found "in the knowledge generally available to one of ordinary skill in the art." *In re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) (citing *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988)).

The motivation to combine can be found either in a prior art reference, or it can be implicit in the knowledge of one of ordinary skill in the art. See *In re Huston*, 308 F.3d 1267, 1280 (Fed. Cir. 2002); *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (Fed. Cir. 1997).

Sources suggesting a combination may be: (1) the combined teachings of the prior art, (2) the knowledge of the ordinary practitioner and (3) the nature of the problem to be solved. "The test for implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would

have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000).

In *Richard Ruiz and Foundation Anchoring Systems, Inc. v. A.B. Chance Company*, No. 03-1333 (Fed. Cir. January 29, 2004), the court emphasized that an "express written teaching in the art" to combine references was not required [emphasis added]. Rather, motivation may come from "the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem."

Please further note the following from Section 2144 of the MPEP: "The rationale to modify or combine the prior art does not have to be expressly stated in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent...The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem...It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by Applicant." Also Chief Judge Nies writes in a concurring opinion, "While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or the prior art specifically suggest making the combination...In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference". See *In re Oetiker* 977 F.2d 1443, 24 USPQ.2d 1443 (Fed.Cir.1992).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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Applicant's comments concerning new claims 14-16 are noted, and the examiner agrees that the prior art of record does not teach each and every limitation of these newly added claims.

Conclusion

10. Applicant's amendment necessitated modified ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

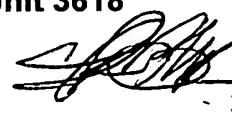
A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618



9/18/06